

Landfills

Have you ever thought about where your trash goes after the garbage truck picks it up? When you throw it away, it begins its journey to the landfill. A landfill is a place where trash is dumped. Landfills are built carefully. They have liners to keep trash from polluting the environment. At the end of each day, dirt is spread over the trash.

Over half of the trash in America goes to landfills. But there is still only a limited amount of space available for them. Building a landfill can cost as much as \$10 million. The cost and limited space available makes it tough for cities to build new landfills when one gets full.

People sometimes think that landfills make trash break down safely. Landfills actually seal trash. This means that it breaks down very slowly. Sometimes it does not break down at all! Archaeologists have looked into landfill sites to find out if trash is preserved or if it leaches into the environment. They found newspapers that were over 20 years old that could still be read! These and other things that can be recycled take up most of our landfill space. If people were better about recycling, we could make landfill space last longer.



Project 1

Take a home survey to record the amounts and types of trash your family throws away each week.

Materials

- copies of the Trash Analysis Sheet
- pencils
- paper

Directions

1. Explain to the other members of your family that you need to monitor the trash that is thrown away at your home in a week.
2. Post a sheet of paper near your family's main garbage can (e.g. the kitchen). Ask everyone in your home to write down the items they throw in the trash on the paper.
3. At the end of the week, analyze the list and fill out the Trash Analysis Sheet to find out how your family could reduce their thrown-out trash.

For the Teacher

Make one copy of the Trash Analysis Sheet (page 11) per student.

Project 2

Create "landfills" in bottles and observe them for four weeks to see what types of trash decay quickly.

Materials

- empty, clear two-liter bottle
- potting soil
- trash (food scraps, paper, pieces of foam, etc.)
- pencils
- duct tape
- paper
- scissors

Directions

1. Have an adult cut the top off of a two-liter bottle. Then, fill the bottom of the bottle with a layer of soil. Place a layer of one type of trash on top of the soil. Place a layer of soil on top of the trash.
2. Repeat this process with a different type of trash layer until there are four to five layers of trash. Tape the top back on the bottle securely.
3. Place the landfill in a sunny location. Water it daily to keep it moist. Observe the landfill every week. Write a brief description of the landfill and how it's changed.
4. At the end of the month, take the landfill apart. Which items did or did not disintegrate?

